Appendix A

SSM 017-12001-00034
IBP, Inc., Logansport, Indiana

Applicant Supplied Emissions Calculations

The tables below summarize the verified applicant supplied emission calculations. The complete calculations follow. The proposed modification involves the installation of an additional Dups wet cooker into the rendering process, as well as capacity increases in all of the other ancillary processes in the rendering line. The existing wet cooker will be retained as a backup, but will not run simultaneously with the new cooker.

To determine level of permitting, the full potential emissions were used from the new wet cooker, while only the increase in potential emissions from the capacity increase was used for the ancillary activities.

	Uncontrolled PM_{10} (TPY)			**Controlled PM_{10} (TPY)**		
Inedible Rendering Process	Modified Source	Existing Source	Increase	Modified Source	Existing Source	Increase
Dups 320U wet cooker	8.34	4.40	8.34	0.42	0.66	0.42
All other facilities, conveyers, crushers, bins etc.	140.19	76.0	64.19	52.15	29.69	22.46
Total Inedible Rendering	148.53	76.0**	72.53	52.57	29.69**	22.88
**does not include existing wet cooker						

	Summary of Potential Emissions (TPY) Dups Cooker Only					
	PM_{10} Uncontrolled	PM_{10} Controlled	VOC	NOx	CO	SO_2
Dups 320U wet cooker	8.34	0.42	24.25	0.33	0.33	0.67

Ms. Rechelle Holloway
IBP, Inc.
800 Stevens Port Drive, Suite 710
Dakota Dunes, SD 57049-8710

Re: Significant Source Modification No:
017-12001-00034

Dear Ms. Holloway:

IBP, Inc. applied for a Part 70 operating permit on December 5, 1996 for a pork rendering source. An application to modify the source was received on March 10, 2000. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

One (1) Inedible Pork Rendering Facility, with a production capacity of 25,378 pounds per hour of crax (bone meal), consisting of the following equipment:

(a) One (1) Dups 320U wet cooker, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(b) One (1) Dups drainer screw, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(c) Three (3) Dups high pressure pressors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(d) Two (2) Sharples centrifuges, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(e) Two (2) screw conveyors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(f) One (1) precrusher metering bin, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(g) One (1) inedible crax bin, with uncontrolled emissions exiting inside the building.

(h) One (1) screen, with uncontrolled emissions exiting inside the building.

(i) One (1) inedible crax silo, with uncontrolled emissions exiting inside the building.

(j) One (1) truck loadout, with uncontrolled emissions.

(k) One (1) rail loadout, with uncontrolled emissions.

The modified source also includes the following insignificant activities:

(a) One (1) natural gas-fired de-hair system known as Singer No. 2, with heat input equal to or less than ten (10) million Btu per hour:

(b) New components in the flotation process with PM_{10} emissions less than 5 pounds per hour, consisting of one (1) decanter feed tank, one (1) centrifuge feed tank, one (1) finished grease tank, one (1) sharples three-phase decanter and one (1) alfa laval centrifuge, all controlled by the existing spray tower.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Patrick T. Brennan, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
PTB/MES
cc: File - Cass County
U.S. EPA, Region V
Cass County Health Department
Air Compliance Section Inspector - Ryan Hillman
Compliance Data Section - Mendy Jones
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

IBP, Inc.
Hwy. 35 & 25 Bypass
Logansport, Indiana 46947

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 017-12001-0003	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a pork packaging source.

Responsible Official:	IBP, Inc.
Source Address:	Hwy. 35 & 25 Bypass, Logansport, IN 46947
Mailing Address:	800 Stevens Port Drive, Suite 710, Dakota Dunes, SD 57049-8710
Phone Number:	1-605-235-3647
SIC Code:	2011
County Location:	Cass
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) Inedible Pork Rendering Facility, with a production capacity of 25,378 pounds per hour of crax (bone meal), consisting of the following equipment:

(a) One (1) Dupps 320U wet cooker, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(b) One (1) Dupps drainer screw, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(c) Three (3) Dupps high pressure pressors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(d) Two (2) Sharples centrifuges, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(e) Two (2) screw conveyors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(f) One (1) precrusher metering bin, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(g) One (1) inedible crax bin, with uncontrolled emissions exiting inside the building.

(h) One (1) screen, with uncontrolled emissions exiting inside the building.

(i) One (1) inedible crax silo, with uncontrolled emissions exiting to the atmosphere.

(j) One (1) truck loadout, with uncontrolled emissions.

(k) One (1) rail loadout, with uncontrolled emissions.

(l) One (1) hammermill with uncontrolled emissions exiting inside the building.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes insignificant activities, as defined in 326 IAC 2-7-1(21).

(a) One (1) natural gas-fired de-hair system known as Singer No. 2, with heat input equal to or less than ten (10) million Btu per hour:

(b) New components in the flotation process with PM_{10} emissions less than 5 pounds per hour, consisting of one (1) decanter feed tank, one (1) centrifuge feed tank, one (1) finished grease tank, one (1) sharples three-phase decanter and one (1) alfa laval centrifuge, all controlled by the existing spray tower.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.

(2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go

thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

(3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.9 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.10 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.11 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.12 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) Unless otherwise specified in this approval, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Inedible Rendering Facility

One (1) Inedible Pork Rendering Facility, with a production capacity of 25,378 pounds per hour of crax (bone meal), consisting of the following equipment:

(a) One (1) Dupps 320U wet cooker, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(b) One (1) Dupps drainer screw, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(c) Three (3) Dupps high pressure pressors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(d) Two (2) Sharples centrifuges, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(e) Two (2) screw conveyors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(f) One (1) precrusher metering bin, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(g) One (1) inedible crax bin, with uncontrolled emissions exiting inside the building.

(h) One (1) screen, with uncontrolled emissions exiting inside the building.

(i) One (1) inedible crax silo, with uncontrolled emissions exiting to the atmosphere.

(j) One (1) truck loadout, with uncontrolled emissions.

(k) One (1) rail loadout, with uncontrolled emissions.

(l) One (1) hammermill with uncontrolled emissions exiting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the venturi/packed bed scrubber shall not exceed 35.8 pounds per hour when operating at a process weight rate of 50,775 pounds per hour.

(b) The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where: E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 VOC [326 IAC 8-1-6]

Any change or modification which may increase the VOC emissions to twenty-five (25) tons per year or more of VOC must be approved by the Office of Air Management (OAM) before such change may occur.

D.1.3 326 IAC 2-7-6(6)

The inedible pork rendering facility shall be operated in the following manner to minimize odors:

(a) Precautions in operation of the process equipment to minimize overheating and burning of inedible rendering material.

(b) Cleaning of inedible rendering equipment and areas shall be done every operational day.

(c) Air from the room housing the inedible rendering equipment shall be vented through six roof vents and scrubbed with water using fine mist atomizing spray nozzles. A minimum of one spray nozzle shall be operational at each vent. The atomizing spray nozzles shall be used as needed to minimize the release of air contaminants from the roof vents, and only when the ambient temperature is above a temperature which will prevent the water spray from freezing.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the venturi/packed bed scrubber.

Compliance Determination Requirements [326 IAC 2-7-6(1)&(6)] [326 IAC 2-1.1-11]

D.1.5 Particulate Matter (PM)

Emissions from the major inedible rendering equipment shall be vented through the venturi/packed bed scrubber. The scrubber shall operate at all times that the rendering facility is in operation. The venturi/packed bed scrubber shall be in operation at all times that the inedible pork rendering facility is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Daily visible emissions notations of the venturi/packed bed scrubber exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.7 Parametric Monitoring

The Permittee shall record the following operating parameters from the venturi/packed bed scrubber at least once per shift when the scrubber is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the acceptable ranges for these values are as follows:

(a) The pressure drop across the first stage of the scrubber shall be less than 6.0 inches of water.

(b) The liquid recycle rate across the first stage of the scrubber shall be within the range of 50 to 100 gallons per minute.

(c) The pressure drop across the second stage of the scrubber shall be less than 4.0 inches of water.

(d) The liquid recycle rate across the second stage of the scrubber shall be within the range of 150 to 200 gallons per minute.

(e) The pH of the scrubbant in the second stage of the scrubber shall be greater than 8.0.

(f) The residual chlorine in the second stage of the scrubber shall be greater than 25 ppm.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of the venturi/packed bed scrubber exhaust.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure,

(B) liquid recycle rate,

(C) pH of the scrubbant water; and

(C) the oxidation reduction potential (ORP).

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

(a) One (1) natural gas-fired de-hair system known as Singer No. 2, with heat input equal to or less than ten (10) million Btu per hour:

(b) New components in the flotation process with PM_{10} emissions less than 5 pounds per hour, consisting of one (1) decanter feed tank, one (1) centrifuge feed tank, one (1) finished grease tank, one (1) sharples three-phase decanter and one (1) alfa laval centrifuge, all controlled by the existing spray tower.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the flotation process shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: IBP, Inc.
Source Address: Hwy. 25 & 35 Bypass, Logansport, Indiana 46947
Mailing Address: 800 Stevens Port Drive, Suite 710, Dakota Dunes, SD 57049-8710
Source Modification No.: SM 017-12001-00034

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70
Significant Source Modification

Source Background and Description

Source Name:	**IBP, Inc.**
Source Location:	**Hwy. 35 & 25 Bypass, Logansport, Indiana 46947**
County:	**Cass**
SIC Code:	**2011**
Operation Permit No.:	**T 017-7369-00034**
Operation Permit Issuance Date:	**Not Yet Issued**
Significant Source Modification No.:	**017-12001-00034**
Permit Reviewer:	**Patrick T. Brennan**

The Office of Air Management (OAM) has reviewed a modification application from IBP, Inc. relating to the construction of the following emission units and pollution control devices:

One (1) Inedible Pork Rendering Facility, with a production capacity of 25,378 pounds per hour of crax (bone meal), consisting of the following equipment:

(a) One (1) Dups 320U wet cooker, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(b) One (1) Dups drainer screw, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(c) Three (3) Dups high pressure pressors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(d) Two (2) Sharples centrifuges, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(e) Two (2) screw conveyors, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(f) One (1) precrusher metering bin, with emissions controlled by a venturi/packed bed scrubber with a flow rate of 18,000 acfm.

(g) One (1) inedible crax bin, with uncontrolled emissions exiting inside the building.

(h) One (1) screen, with uncontrolled emissions exiting inside the building.

(i) One (1) inedible crax silo, with uncontrolled emissions exiting inside the building.

(j) One (1) truck loadout, with uncontrolled emissions.

(k) One (1) rail loadout, with uncontrolled emissions.

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) One (1) natural gas-fired de-hair system known as Singer No. 2, with heat input equal to or less than ten (10) million Btu per hour:

(b) New components in the flotation process with PM_{10} emissions less than 5 pounds per hour, consisting of one (1) decanter feed tank, one (1) centrifuge feed tank, one (1) finished grease tank, one (1) sharples three-phase decanter and one (1) alfa laval centrifuge, all controlled by the existing spray tower.

History

On March 19, 2000, IBP Corporation submitted an application to the OAM requesting to add a second wet cooker to its inedible pork rendering facility, and to increase production in that facility from 13,400 pounds per hour to 25,378 pounds per hour of finished crax (bone meal). Emissions from the inedible pork rendering facility will be vented into a new venturi/packed bed scrubber for particulate and odor control. The existing wet cooker will remain in place for use as a backup, but both units will not operate simultaneously.

Emissions from the current configuration of the inedible pork rendering facility are controlled through a spray tower. Following the transfer of the rendering facility emissions to the venturi/packed bed scrubber, emissions from the flotation process, which are currently released uncontrolled indoors, will be vented to the spray tower. This is expected to reduce odors.

The source will also construct an additional de-hair system, known as Singer No. 2. This facility was previously permitted but never built, and is an insignificant activity.

Existing Approvals

The source applied for a Part 70 Operating Permit T 017-7369-00034 on December 5, 1996. The source has been operating under previous approvals including, but not limited to the following:

(a) Permit CP 017-4534-00034, issued on April 29, 1996.

(b) Permit CP 017-9481-00034, issued on June 15, 1998. This permit supercedes CP 017-4534-00034, and resolved issues raised by the source on appeal.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S-2	Singer No. 2	41.5	2.67	3,175	480
C003	Venturi/Packed Bed Scrubber	43.0	2.83	18,000	110

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 19, 2000.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document on pages 1 through 19 of 19.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	**Potential To Emit** (tons/year)
PM	72.5
PM_{10}	72.5
SO_2	0.670
VOC	24.3
CO	0.330
NO_X	0.330

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1998 OAM emission data.

Pollutant	**Actual Emissions** (tons/year)
PM	8.06
PM_{10}	8.06
SO_2	0.343
VOC	8.17
CO	25.4
NO_X	30.3

County Attainment Status

The source is located in Cass County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Cass County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Cass County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	22.8
PM_{10}	22.8
SO_2	10.3
VOC	210
CO	25.8
NO_X	142

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) These emissions are based upon the Technical Support Document for CP 017-4534-00034. Subsequent stack tests required by CP 017-4534-00034 indicated that VOC emissions are much lower than original estimates. Source wide potential VOC emissions will be re-evaluated in the Title V permit.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM_{10}	SO_2	VOC	CO	NO_X	HAPs
Proposed Modification	22.9	22.9	0.67	24.3	0.33	0.33	0.0
Entire Source after Modification	45.7	45.7	11.0	234	25.1	142	0.0
PSD Threshold Level	250	250	250	250	250	250	-

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 Operating Permit T 017-7369-00034 on December 5, 1996. The capacity increase and new equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Justification for Modification

(a) The Part 70 Operating Permit is being modified through a Part 70 Significant Source Modification to a yet to be issued Part 70 Operating Permit because the potential to emit before controls of this modification exceeds twenty five (25) tons of PM per year. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4).

(b) Since the Part 70 Operating Permit for this source has not been issued yet, the approval of this Significant Source Modification will allow the source to construct and operate.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Entire Source

326 IAC 2-2 Prevention of Significant Deterioration

This proposed source will be a minor PSD source since all emissions, after controls and limits, are less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-7-5(13) (Preventive Maintenance Plan)

The source is required to submit a Preventive Maintenance Plan (PMP) for the inedible pork rendering facility and venturi/packed bed scrubber because the facility has a control device and allowable PM emissions exceed 10.0 pounds per hour.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the inedible pork rendering facility shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

$E = 4.10\ (25.4)^{0.67} = 35.8$ pounds per hour

Controlled PM emissions from this facility are 5.21 pounds per hour, therefore this facility is in compliance with the rule. The venturi/packed bed scrubber shall be in operation at all times the rendering facility is in operation, in order to comply with this limit.

326 IAC 2-7-6(6)

Meat rendering facilities have a potential odor nuisance. IBP Corporation has previously agreed, in CP 017-9481-00034, to a series of permit conditions for odor abatement. These include operation and maintenance procedures practiced in the industry, the use of an oxidizing agent, and the venting of emissions from the inedible pork rendering facility into the spray tower. These conditions have been modified to reflect the venting of rendering emissions into the new venturi/packed bed scrubber, and the venting of previously uncontrolled emissions from the flotation process into the spray tower. The manufacturers specification for odor elimination by the venturi/packed bed scrubber is 97%.

To ensure compliance with these conditions, the venturi/packed bed scrubber shall be in operation at all times the rendering process is in operation.

326 IAC 8-1-6 (BACT)

Because the VOC emissions from the Dups 320U wet cooker are not covered by any other OAM rule, 326 IAC 8-1-6 could be applicable. However, because potential VOC emissions from this process are below 25.0 TPY, this rule does not apply.

326 IAC 2-4.1-1 (New Source Toxics Control)

The proposed modification has no significant emissions of Hazardous Air Pollutants (HAPs). Therefore, 326 IAC 2-4.1-1 does not apply.

State Rule Applicability - Insignificant Activities

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the flotation process shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The venturi/packed bed scrubber has applicable compliance monitoring conditions as specified below:

(a) Daily visible emissions notations of the venturi/packed bed scrubber exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) The Permittee shall record the following operating parameters from the venturi/packed bed scrubber at least once per shift when the scrubber is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the acceptable ranges for these values are as follows:

(1) The pressure drop across the first stage of the scrubber shall be less than 6.0 inches of water.

(2) The liquid recycle rate in the first stage of the scrubber shall be within the range of 50 to 100 gallons per minute.

(3) The pressure drop across the second stage of the scrubber shall be less than 4.0 inches of water.

(4) The liquid recycle rate in the second stage of the scrubber shall be within the range of 150 to 200 gallons per minute.

(5) The pH of the scrubbant in the second stage of the scrubber shall be greater than 8.0.

(6) The oxidation reduction potential (ORP) in the second stage of the scrubber shall be greater than 25 ppm.

These monitoring conditions are necessary because the venturi/packed bed scrubber must operate properly to ensure compliance with 326 IAC 2-7 and 326 IAC 2-1-3(i)(8).

Conclusion

The construction and/or operation of this pork rendering facility shall be subject to the conditions of the attached proposed Significant Source Modification No. 017-12001-00034.

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Part 70 Significant Source Modification

Source Name: **IBP, Inc.**
Source Location: **Hwy. 35 & 25 Bypass, Logansport, Indiana 46947**
County: **Cass**
SIC Code: **2011**
Source Modification: **017-12001-00034**
Permit Reviewer: **Patrick T. Brennan**

On May 8, 2000, the Office of Air Management (OAM) had a notice published in the Pharos Tribune, Logansport, Indiana, stating that IBP, Inc. had applied for a Significant Source Modification for an Inedible Pork Rendering Facility with a venturi/packed bed scrubber for air pollution control. The notice also stated that OAM proposed to issue a Significant Source Modification for this operation and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification should be issued as proposed.

On June 2, 2000, Rechelle Hollowaty of IBP, Inc., submitted comments on the proposed Significant Source Modification. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**

Comment 1:

In several places throughout the permit a reference is made to the Dupps Supercooker. Dupps is misspelled throughout the permit as “Dups”.

Response 1:

All references to the Dupps Supercooker have been changed to use the proper spelling of Dupps.

Comment 2:

There is a list of equipment in the permit labeled as (a) through (k). This list is placed in several locations throughout the permit and Technical Support Document. In this list IBP did not see the hammermills listed as a source of emissions. The hammermills are existing equipment but need to be listed due to the change in emissions from the increase of throughput from the new cooker. In reviewing the calculations however it appears that the hammermills were considered in the total PTE calculations throughout the document.

Response 2:

The Hammermill was included in the PTE calculations, but was inadvertently left off of the equipment list in both Section A.1 and Section D.1. The following correction has been made in both places.

(l) One (1) hammermill with uncontrolled emissions exiting inside the building.

Comment 3:

Also in the equipment, item (i) lists the Inedible Crax Silo with uncontrolled emissions existing inside the building. This is incorrect. The crax silo is a structure located outside the rendering building, and the emissions are uncontrolled exhausting directly to the atmosphere.

Response 3:

The following correction has been made to the equipment list in both Section A.1 and Section D.1.

(i) One (1) inedible crax silo, with uncontrolled emissions exiting ~~inside the building~~ **to the atmosphere.**

Comment 4:

As a general comment, the draft permit states that the application was received on March 10, 2000 and the Technical Support Document states that the application was received on March 19, 2000. This date should be consistent throughout the document.

Response 4:

The permit modification application was received at IDEM on March 10, 2000. This date was stated correctly in the draft permit, and no correction is necessary.

Comment 5:

In Section D.1.7 of the permit, part (f) states that the oxidation reduction potential (ORP) in the second stage of the scrubber shall be greater than 25 ppm. This is inconsistent with the permit application. The manufacturer's information states that the residual chlorine shall be within the range of 25 ppm to 100 ppm not the ORP. ORP is measured in millivolts not ppm and the manufacturer did not give IBP an OPR range as an operating parameter. The ORP is a device that will help the operators to control the residual chlorine but the parameter to monitor should be the residual chlorine not the ORP. ORP reading can fluctuate with pH and is not 100% reliable as a substitute parameter of the residual chlorine in the scrubber water. Therefore, the operators will use and take daily recordings of ORP along with checking daily the residual chlorine to make sure the residual chlorine is within the manufacturer's recommended range.

Response 5:

Condition D.1.7 (f) has been revised as follows:

(f) The **residual chlorine** ~~oxidation reduction potential (ORP)~~ in the second stage of the scrubber shall be greater than 25 ppm.

Comment 6:

The stack heights and stack diameters listed in the Stack Summary Table of the Technical Summary Document are inconsistent with the air permit application. The Singer will have a height of 45 ft. and a diameter of 2.5 ft. The new Inedible Scrubber will have a height of 50 ft. and a diameter of 2.33 ft.

Response 6:

Two sets of stack heights were listed in the air permit application, those found in the TSD and those listed in the above comment. The TSD stack summary table has been revised as follows:

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S-2	Singer No. 2	**45.0**	**2.50**	3,175	480
C003	Venturi/Packed Bed Scrubber	**50.0**	**2.33**	18,000	110

Comment 7:

After review of the PTE emissions before control listed in the Technical Support Document, IBP understands that the Singer and the Flotation System emissions are not included in this table due to the Singer and the Flotation system being considered insignificant activities. IBP is with the understanding, after review of the new source review federal regulations, that if a number of changes are occurring at the facility at one time, even though individually the changes may be insignificant, all changes and the emission increase or decreases should be considered in the application for the modification of PTE before and after control equipment. In the case of a major facility for PSD, all changes would have to be included to determine if the whole modification at the facility was considered a major modification. Therefore, IBP would prefer a statement from IDEM that the singling out of parts of this modification is acceptable since the facility is not a major for PSD source.

In addition to the above, a review of the emissions and the calculations submitted in the application indicated that an error was made in the PTE calculations for the modified case. The calculations as well as the permit show that the finished crax production from the new Supercooker will be 25,378 lbs/hr, which is incorrect. The total of crax and grease from the cooker is 25,378 lbs/hr. Emissions are based on only crax. The correct crax finished product production number from the new Supercooker is 13,957 lbs/hr. New calculations are included along with new Summary of Emission to reflect the correction. The correct PTE is PM/PM_{10} 41.57 tpy, SO_2 0.37 tpy, VOC 13.45 tpy, CO 0.18 tpy, and NOx 0.18 tpy. For PM/PM_{10}, the control equipment was not used but the enclosure control for the crax bin, the hammermills, and the screens was included.

Due to this error, the Potential to Emit of Modification after Issuance Table will also need to be updated to reflect the correct emissions. The correct values for the Proposed Modification Row will be PM/PM_{10} – 0.43 tpy, SO_2 0.18 tpy, VOC 13.45 tpy, CO 0.18 tpy, and NOx 0.18 tpy. Corrections will need to be made to the Entire Source after Modification Row to reflect the new values.

Response 7:

The OAM prepared summary of the applicant supplied emissions calculations, which was page 1 of 19 of Appendix A to the Technical Support Document, has been updated as follows:

Revised Appendix A

SSM 017-12001-00034
IBP, Inc., Logansport, Indiana

Applicant Supplied Emissions Calculations

The tables below summarize the applicant supplied emission calculations submitted with comments following public notice. The proposed modification still involves the installation of an additional Dupps wet cooker into the rendering process, but does not include the large capacity increase described in the draft permit. Several of the ancillary processes in the rendering line were previously considered as fugitive emissions. These emissions were not included in the PM/PM_{10} PTE in the existing permit, and are treated as emissions increases in this permit. The existing wet cooker will be retained as a backup, but will not run simultaneously with the new cooker.

To determine level of permitting, the full potential emissions were used from the new wet cooker, as well as emissions previously considered fugitive in ancillary processes.

	Uncontrolled PM_{10} (TPY)			**Controlled PM_{10} (TPY)**		
Inedible Rendering Process	Modified Source	Existing Source	Increase	Modified Source	Existing Source	Increase
Dupps 320U wet cooker	**4.58**	4.40	**4.58**	**0.23**	0.66	**0.23**
All other facilities, conveyers, crushers, bins etc.	**82.33**	11.20	**72.13**	**28.09**	2.11	**25.98**
Total Inedible Rendering	**87.91**	11.20**	**76.71**	**28.32**	2.11**	**26.21**
**does not include existing wet cooker						

	Summary of Potential Emissions (TPY) Dupps Cooker Only					
	PM_{10} Uncontrolled	PM_{10} Controlled	VOC	NOx	CO	SO_2
Dupps 320U wet cooker	**4.58**	**0.23**	**13.45**	**0.18**	**0.18**	**0.37**

The original emissions calculations submitted by the applicant were checked and verified by OAM. However, they were based upon a finished crax production rate of 25,378 pounds per hour, which was nearly double the current projection of 13,957 pounds per hour. OAM has reviewed the revised emissions calculations submitted by the applicant and found them to be valid. However, the OAM does not agree with the assumptions and methodologies used by the applicant to compute the PM/PM_{10} PTE discussed in Comment 7.

The Potential to Emit of the Modification table from page 3 of 8 of the TSD has been revised as follows to reflect the new emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	**Potential To Emit** (tons/year)
PM	~~72.5~~ **76.7**
PM_{10}	~~72.5~~ **76.7**
SO_2	~~0.670~~ **0.370**
VOC	~~24.3~~ **13.5**
CO	~~0.330~~ **0.180**
NO_X	~~0.330~~ **0.180**

The Potential to Emit of Modification after issuance table from page 5 of 8 of the TSD has also been revised as follows to reflect the new emissions calculations.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM_{10}	SO_2	VOC	CO	NO_X	HAPs
Proposed Modification	~~22.9~~ **26.2**	~~22.9~~ **26.2**	~~0.67~~ **0.37**	~~24.3~~ **13.5**	~~0.33~~ **0.18**	~~0.33~~ **0.18**	0.0
Entire Source after Modification	~~45.7~~ **28.3**	~~45.7~~ **28.3**	~~11.0~~ **10.7**	~~234~~ **30.0**	~~25.1~~ **26.0**	142	0.0
PSD Threshold Level	250	250	250	250	250	250	-

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

It is the policy of OAM not to quantify the emissions from insignificant activities unless they are critical to the determination of the source status with regard to PSD or some other federally enforceable limit. As the above table shows, the modified source is well below PSD levels, and no other limits apply.

Comment 8:

An inconsistency was noted with regard to the emissions listed in the Technical Support Document and the 1998 Air Emissions Inventory submitted to IDEM. The following are the emissions that IBP submitted in the emission inventory: PM/PM_{10} 10.16 tpy, VOC 8.23, and CO 25.46.

Response 8:

The table of actual emissions from page 3 of 8 of the TSD has been updated as follows:

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1998 OAM emission data, as well as corrections supplied by the source in Comment 8.

Pollutant	**Actual Emissions** (tons/year)
PM	~~8.06~~ **10.2**
PM_{10}	~~8.06~~ **10.2**
SO_2	0.343
VOC	~~8.17~~ **8.23**
CO	~~25.4~~ **25.5**
NO_X	30.3

Comment 9:

In review of the Source Status Table listed in the Technical Support Document, IBP noticed that the emission rates for VOC listed in the July 1996 permit are still being carried forward as potential VOC emissions from the Logansport facility. IBP has disputed these high VOC emissions in the past and even stack tested the scrubber system as well as individual sources to establish actual and potential VOC values. IBP's stack test was witnessed by an IDEM representative and was an accepted test by IDEM. The stack test showed VOC emissions much less from the facility than the listed 210 tpy. In the July 1996 permit, 188.7 tpy of emissions were being estimated from the rendering cookers only which are included as part of the 210 tpy for the facility. No emissions were considered from the blood system for product drying only (combustion is considered separate) and from the hair cooker for product drying. Using IBP's stack test data performed at the Logansport facility the total estimated VOCs from rendering, including cookers, blood dryers, and the hair cookers are estimated at 16.58 tpy which should replace the 188.7 tpy. The remainder of the facility's VOC emissions are from combustion sources as listed in the facility permit. (Cookers - 12.91 tpy from cookers, Blood Dryer - 1.90 tpy, Hair Cooker - 1.77 tpy). The emissions of 12.91 tpy for the cooker will increase to 24.45 tpy and the total VOC emissions from the rendering area to 28.12 tpy. The test reports and the calculations of emission factors used were submitted to IDEM, Mr. Ed Surla, dated February 13, 1998.

IBP feels that the VOC emissions for the facility need to be corrected and appropriately accounted. The facility is nowhere near the 250-tpy PTE that the current permit indicates. Should IBP in the future install equipment that would contribute to the PTE VOC of the facility, IBP does not want an issue for the facility with PSD being a major emitter for VOCs. IBP would appreciate the VOC emissions corrected.

Response 9:

OAM recognizes that the VOC emissions contained in the Existing Source Status table on page 4 of 8 of the TSD did not include the results of the stack tests and data submitted to IDEM in 1998. This table has been revised as follows. In addition, the source status following the modification, which was presented in response to Comment 7, also includes the revised VOC PTE.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	**Emissions** (tons/year)
PM	22.8
PM_{10}	22.8
SO_2	10.3
VOC	~~210~~ **16.58**
CO	25.8
NO_X	142

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.